WHAT IS CLAIMED IS:

1. A beam shaping device for shaping a light beam, characterized in that the refractive index of the beam shaping device changes in accordance with an applied voltage.

2. A beam shaping device according to claim 1, comprising at least two electrodes for applying the voltage and a nonlinear optical material arranged between the electrodes.

3. A beam shaping device according to claim 2, wherein the beam shaping device is a substantially prism-shaped beam shaping device whose incidence surface and emission surface are not parallel and which changes an emerging angle of the light beam.

4. A beam shaping device according to claim 2, wherein the nonlinear optical material is a phosphate crystal.

5. A beam shaping device according to claim 2, wherein the nonlinear optical material is a lithate crystal.

6. A beam shaping device according to claim 2, wherein the nonlinear optical material is a borate crystal.

7. An optical head, comprising:

a light source for emitting a light beam,

a beam shaping device for shaping the light beam from the light source,

an objective lens for gathering the light beam from the beam shaping device, and

a driving means for driving the objective lens,

wherein the refractive index of the beam shaping device changes in accordance with an applied voltage.

8. An optical head according to claim 7, wherein the beam shaping device includes at least two electrodes for applying the voltage and a nonlinear optical material arranged between the electrodes.

9. An optical head according to claim 7, wherein the light source emits the light beam using a semiconductor laser.

10. An optical head according to claim 7, wherein the wavelength of the light source is 460 nm or shorter.

11. An optical head, comprising:

a semiconductor laser for emitting a light beam,

an objective lens for gathering the light beam,

a driving means for driving the objective lens, and

a deflecting element provided between the semiconductor laser and the objective lens for deflecting the light beam from the semiconductor laser.

12. An optical head according to claim 11, wherein the deflecting element is a beam shaping device for shaping the light beam and the refractive index thereof changes in accordance with an applied voltage.

13. An optical head according to claim 12, wherein the beam shaping device includes at least two electrodes for applying the voltage and a nonlinear optical material arranged between the electrodes.

14. An optical head according to claim 11, wherein the wavelength of the semiconductor laser is 460 nm or shorter.

15. A master disk recording apparatus, comprising:

a rotating means for rotating while holding a master disk having a photosensitive layer,

an optical head for gathering a light beam and irradiating the master disk with the gathered light beam, and

a moving means for moving one of the optical head and the rotating means in a radial direction of the master disk,

wherein the optical head includes a light source for emitting the light beam, a beam shaping device for shaping the light beam from the light source, an objective lens for gathering the light beam from the beam shaping device, and a driving means for driving the objective lens, wherein the refractive index of the beam shaping device changes in accordance with an applied voltage.

16. A master disk recording apparatus according to claim 15, wherein the beam shaping device includes at least two electrodes for applying the voltage and a nonlinear optical material arranged between the electrodes.

17. A master disk recording apparatus, comprising:

a rotating means for rotating while holding a master disk having a photosensitive layer,

an optical head for gathering a light beam and irradiating the master disk with the gathered light beam, and

a moving means for moving one of the optical head and the rotating means in a radial direction of the master disk,

wherein the optical head includes a semiconductor laser for emitting the light beam, an objective lens for gathering the light beam, a driving means for driving the objective lens, and a deflecting element provided between the semiconductor laser and the objective lens for deflecting the light beam from the semiconductor laser.

18. A master disk recording apparatus according to claim 17, wherein the deflecting element is a beam shaping device for shaping the light beam and the refractive index thereof changes in accordance with an applied voltage.

19. A master disk recording apparatus according to claim 18, wherein the beam shaping device includes at least two electrodes for applying the voltage and a nonlinear optical material arranged between the electrodes.